Role of qualified national personnel in the social and economic development of developing countries

Report of the Secretary-General

* A/42/50.

** See Economic and Social Council decision 1987/108.
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I. INTRODUCTION

1. The present report is submitted through the Governing Council of the United Nations Development Programme (UNDP) and the Economic and Social Council to the General Assembly at its forty-second session in response to paragraph 3 of its resolution 40/213, entitled "Role of qualified national personnel in the social and economic development of developing countries".

2. This matter has been before the General Assembly on various occasions. In its resolution 37/228 of 20 December 1982, the Assembly took note of the report of the Administrator of the United Nations Development Programme on the subject (DP/1982/9 and Add.1), invited Governments of Member States and relevant organizations to continue to take appropriate action to promote the training of qualified national personnel, and requested the Secretary-General to submit a progress report on the implementation of the resolution to the Assembly at its thirty-ninth session.

3. Following a note by the Secretary-General (A/39/308-E/1984/118) the General Assembly requested the Secretary-General, in the implementation of resolution 37/228, to consult as soon as possible with Governments of Member States.

4. In resolution 39/219 of 18 December 1984, the General Assembly requested the Secretary-General to compile and summarize the information presented by Governments. The reports of the Secretary-General of 12 September 1985 (A/40/549) and of 24 February 1986 (A/40/549/Add.1) provide the information received from 20 Member States and four organizations of the United Nations system.

5. Pursuant to that resolution, the Secretary-General sent a note verbale to all Member States on 21 April 1986 requesting information on experience in establishing and developing its system of training qualified national personnel, particularly on the principles, objectives and structures of those systems. In addition, five organizations of the United Nations system were consulted. Replies have been received from 14 countries, namely, Burma, the Byelorussian Soviet Socialist Republic, Costa Rica, Denmark, the German Democratic Republic, Japan, Mauritius, Mongolia, the Netherlands, Oman, the Ukrainian Soviet Socialist Republic, the Union of Soviet Socialist Republics, the United Arab Emirates and Zimbabwe. Of these, six had provided information in the 1985 round. The focus of the information received in 1986 was on progress made in the interim. Information received is compiled and summarized below. Information provided by the United Nations Conference on Trade and Development (UNCTAD), the International Labour Organisation (ILO), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the United Nations Industrial Development Organization (UNIDO) is also given below.

6. The valuable information received from Member States and organizations of the United Nations system shows a wide degree of variety and grade of development of the educational systems and of regional and world-wide co-operation. As a common issue it can be stated that a solid system of vocational training in addition to general education is felt necessary.
II. REPLIES RECEIVED FROM GOVERNMENTS

BURMA

7. In its response, Burma draws attention to the 2.4 per cent annual increase of the population in the working age group, which constitutes 56 per cent of the total population. Training skilled and technical personnel is of critical importance for growth and structural changes.

8. The recent fourth four-year plan objectives include the training of professionals, technicians and skilled workers, laying down the foundation for basic education and promoting it to international standards, as well as extending research programmes for development of the educational system. The share of expenditures on education increased year by year.

9. Burma has 13 technical high schools, 8 technical institutes, 9 agricultural high schools, 6 agricultural institutes and 34 other vocational schools.

10. Primary, secondary and high schools fall under the responsibility of the Department of Basic Education, while the various professional institutes, such as the institutes of technology, economics, education as well as universities in the arts and science and degree colleges are organized under the Department of Higher Education. Institutes with courses for degrees in medicine, dentistry, medical technicians and nurses fall under the Ministry of Health. The Department of Agricultural, Vocational and Technical Education is responsible for the technical institutes, technical high schools, agricultural high schools, other vocational schools and evening classes.

11. Technical high schools offer vocational initial training courses during a period of two years for welding, machining, turning, pipefitting, electrical work, carpentry, masonry, automobile maintenance and the like. The other vocational schools offer 6-12 month courses for bookbinding, metal spinning, household electrical appliance repair, office equipment repair, sewing machine repair, bicycle repair, watch repair, as well as courses in cooking, tailoring, hairdressing, typing, shorthand and bookkeeping. These courses and the evening classes offer skills to the population of a low educational level for securing jobs or for self-employment.

12. The Ministry of Labour provides support services for training while also providing assistance for the training of supervisors, instructors and trainers for the various ministries at a vocational training centre.

13. The two Ministries of Industry operate modern group training centres for persons between the ages of 15 and 18 who passed the basic education middle-level examination. Systematic basic training is followed by on-the-job training for skill development. The courses are held during a period of two to three years, depending on the trade.
14. Other ministries also conduct group training in centres for initial and further skill training of workers in construction, transport, communication, agriculture, forestry and health.

15. A project document for strengthening the vocational training infrastructure and the introduction of a national system of occupational standards was drawn up on the basis of recommendations of a seminar on in-plant training held in 1984. The project is under consideration with the authorities concerned.

BYELORUSSIAN SOVIET SOCIALIST REPUBLIC

16. The Byelorussian Soviet Socialist Republic in its response refers to its report reflected in the report of the Secretary-General (see A/40/549) and gives the following additional information.

17. The policy of educating and preparing people capable of both physical and intellectual work for active participation in the national economy, science and culture is pursued with success. Widespread illiteracy has been eliminated and a status of comprehensive secondary education has been reached.

18. The current reform of general and vocational schools aims at a unified multidisciplinary work-oriented school system, in which vocational and general education will be further improved, brought closer together and eventually merged.

19. At the end of 1985, approximately 85 per cent of the employed population had secondary or higher education, and 38 per cent underwent various kinds of training. The total number of graduate specialists amounted to 1.3 million, i.e., 14.6 times their number in 1940. The system of specialized secondary and higher education is developing in accordance with the needs and requirements of industry, science and culture.

20. The training experience gained is widely used to assist developing countries. Specialists help to train nationals in countries in Africa, Asia and Latin America. From 1962 to 1986 nearly 3,700 specialists were trained in training establishments in the Byelorussian Soviet Socialist Republic. About 4,600 trainees from 86 countries are currently trained in the Republic.

COSTA RICA

21. The response from Costa Rica refers to the training of civil servants in the Costa Rican public administration.

22. The General Directorate of the Civil Service is responsible for the training of staff of the ministries and other public institutions. During the first three decades, the General Directorate concentrated on the classification of posts, the recruitment of staff, and the establishment of norms, procedures, registers and controls, while training was more or less neglected.
23. The economic crisis and budgetary restraints prompted the General Directorate to request a study on a staff training subsystem in order to develop quickly and systematically training activities. As a result, a staff training subsystem for ministries and institutions was created, which established incentives for civil servants who wanted to acquire new knowledge, change their attitudes and improve their abilities and skills. The Staff Training Department of the General Directorate is the general organ of the subsystem. Training units are established in the various ministries and institutions. The Staff Training Council advises on training policies and recommends strategies.

24. The objectives of the staff training subsystem are:

(a) To develop training through a co-operative subsystem on inter-institutional efforts;

(b) To provide incentives for civil servants who want to improve their knowledge, abilities and skills;

(c) To better utilize the existing human and material resources.

The functions of the ministerial and institutional training units are mainly to plan, organize, supervise and evaluate training programmes in the administration of their respective ministries or entities, and to arrange competitions for the awarding of fellowships.

25. After the creation of training units in all ministries and institutions, a register of human resources is set up in each entity in order to ensure the placement and filling of positions for instructors. They also have to record any other needs for training, course programmes, evaluation of courses and instructors.

26. The newly applied staff training subsystem did, aside from a more technical and systematic performance and development, achieve uniformity of policies and methods in a short time.

DENMARK

27. Denmark responded to the Secretary-General's note verbale of 21 April 1986 by referring to the reply of the Government of Denmark forwarded to the Administrator of the United Nations Development Programme on 9 March 1982, which gave detailed information with regard to questions raised in the note verbale. A summary of the previous reply is contained in the report of the Secretary-General (see A/40/549).

GERMAN DEMOCRATIC REPUBLIC

28. The German Democratic Republic refers to its proposals concerning general guidelines for systems of training qualified national personnel as reflected in the report of the Secretary-General (see A/40/549). In addition, the following experience gained and methods applied are described.
29. As a visible expression of social welfare and the guaranteed right of all children to enjoy a happy childhood in social comfort, 70 per cent of all children up to three years of age are cared for and educated in crèches while their parents are at work. From age three to school age, 90 per cent of all children attend a kindergarten. A total of 13,150 pre-school facilities exist with 90,400 teachers. In 1986 the number of places available were 886,772; by 1990 an additional 105,000 places are envisioned.

30. The 10-class polytechnical secondary school combines learning with practical work. At the same time a high level of general education is provided. In these institutions 2 million children are taught by 177,700 teachers. After completing school, gifted pupils can attend an extended two-year secondary school to acquire standards required for entering universities.

31. More than 40 new curricula and corresponding teaching aids have been introduced. Every week some 800,000 pupils from grades 7 to 10 receive training from approximately 30,000 instructors at more than 5,000 industrial, construction or agricultural enterprises; in grades 9 and 10 some programmes are optional.

32. More than 1.38 million school children participated in hobby and special interest groups.

33. The number of classrooms at secondary schools has increased from 89,594 in 1970 to 122,042 in 1986. An additional 10,661 classrooms will be acquired by 1990.

34. During the past five years over 1 million apprentices have completed training and acquired a skilled worker's certificate in one of over 300 different trades. A total of 963 company-operated or municipal vocational schools has been added to the 3,600 training units at combines, co-operatives and other establishments which train skilled workers.

35. In 1985, the 54 universities and higher institutions as well as 239 technical schools were attended by 208,400 full-time students, while over 4,400 received training at universities or colleges in other socialist countries. The share of graduates from higher learning and technical schools as compared to the total work-force rose from 11 per cent in 1970 to 21 per cent in 1985. Courses for skilled workers to obtain standards required for entering universities are successful. From 1981 to 1985 some 5,200 enrolled in such courses, currently operated by 19 universities and higher institutions.

36. Some 300,000 persons improved their knowledge in 219 adult education centres during the academic year 1984/85. As a result of the integrated educational system today 85 per cent have learned a trade, as opposed to 24 per cent of the entire work-force in 1945. Among the younger generation vocational training accounts for over 95 per cent.

37. The educational system is completed by a system of training and further training for foreigners, especially from developing countries. In addition to the facilities mentioned above, some are especially established to cater for the training needs of foreigners. The Herder Institute is the foreign students'
Institute at the Karl Marx University. It covers training in German and a variety of subjects required for entering university. An institute for vocational guidance was established in Berlin, as well as a school of solidarity to train students in journalism.

38. Since 1970 some 80,000 people from developing countries have improved their qualifications in the German Democratic Republic, of which about 19,900 have graduated from universities, institutes of higher learning or technical schools. Beginning in 1986, 27,647 nationals from developing countries were undergoing vocational training or taking upgrading courses in the German Democratic Republic. In addition, 7,500 students from developing countries were enrolled in universities in the German Democratic Republic.

39. The following collaboration with developing countries is provided:

   (a) Training courses, including studies;
   (b) Offering further training schemes and research assistance;
   (c) Providing experts, teaching staff and advisors abroad;
   (d) Providing system solutions for equipment and management of colleges, medical institutions and other forms of know-how;
   (e) Distributing teaching and study materials;
   (f) Selling patent rights and granting licences on scientific-technological findings and documentation;
   (g) Making scientific and technological tests, trials and efforts on a contractual basis;
   (h) Preparing scientific, technological and economic analyses and expert opinions;
   (i) Rendering service for scientific-technological, medical and laboratory equipment;
   (j) Distributing selected achievements in the construction of scientific apparatus;
   (k) Selling biochemicals and fine chemicals;
   (l) Selling unique apparatus and instruments;
   (m) Offering selected medical care.

40. The higher education in the German Democratic Republic provides training for foreign students in more than 30 basic disciplines.
JAPAN

41. The response from Japan was contained in a brochure entitled "Human resources development administration" issued by the Ministry of Labour in Japan. Its content refers to vocational training and is briefly described below.

42. The aim of vocational training is to enable workers to acquire skills and knowledge, thereby developing and improving their capabilities, stabilizing their employment, improving their socio-economic status and contributing to the development of the society.

43. The types of education available are: (a) basic training; (b) upgrading training; (c) occupational capability redevelopment training; and (d) instructor training. Those who have completed the basic training and passed a trade skill verification may call themselves "junior certified skilled workers". The upgrading training consists of five courses. Instructor training is provided in long-term courses, short-term courses or upgrading courses. The brochure describes the vocational training facilities, i.e., the institute of vocational training for instructor training and the vocational training centres for basic training, upgrading training and redevelopment training at the local level.

44. Vocational training is given free of charge; some training centres are provided with dormitories, and financial assistance is given in the form of loans and grants.

45. Vocational training is also conducted by enterprises which fulfil the training standards. Approximately 300 enterprises and 859 joint training organizations provide training with financial assistance from the Government.

46. A lifelong vocational training incentive grant system promotes systematic training throughout the workers' entire working lives. Vocational ability development associations are established to guide the private sector in training, testing and related matters. Since 1962 Japan has successfully participated in the international vocational training competition.

47. Japan co-operates with developing countries in the establishment and management of vocational training centres and in training instructors, senior skilled workers and high-level educational administrators in Japan. Japan also provides financial contributions and experts for the Asian Pacific Skill Development Programme (APSDEP). Private enterprises conducting overseas vocational training receive training materials, training of instructors and other support through the overseas vocational training co-operation centre established in 1984. The international skill development programme with the ILO association of Japan as executing agency accepts trainees from industries in developing countries.

MAURITIUS

48. In its response, Mauritius refers to the need to enhance the employment prospects of new entrants to the labour force, to improve the quality of the
work-force and to create various new skills. For an island economy the Government is fully aware of the central role manpower could play.

49. In 1985, a manpower planning and training division was set up under the Ministry of Planning and Development in order to advise on vocational and technical training, to co-ordinate all training activities, to seek external support, and to act as the focal point for all training and manpower development issues. The goal was to provide training facilities and to assist graduates in finding employment.

50. The excellent network of schools and institutions meets the demand for placement. The heavy academic bias in schooling weakens the chances of school-leavers to obtain employment. The reform of the curricula of the schools is directed to solve this problem.

51. Teaching at the University of Mauritius has been largely concentrated on in-service and non-award courses for those already in employment. The teacher training institute, the Mauritius Institute of Education (MIE), and others carry out research in curriculum development and provide in-service and refresher courses. State-managed institutions include vocational and technical training at a lycée politechnique, two industrial trade training centres, five handicraft centres, a hotel and catering training school and a sea training school.

52. Departmental training is provided by the Ministry of Health for nurses, by the Ministry of Agriculture, Fisheries and Natural Resources for agriculture, fishery and forestry, by the Development Works Corporation for building trades, by the Department of Telecommunications for telecommunication trades and by the Central Electricity Board for electricians.

53. Regional training courses are held at the UNDP-funded regional sugar cane training centre for Africa and the regional training centre in family health for Africa. They enable countries in Africa to satisfy their needs for qualified personnel in health and sugar technology.

54. Training abroad under various technical assistance programmes was available for some 200 scholarships annually.

55. Mauritius has no major difficulties in meeting its professional manpower requirements. However, critical shortages sometimes occur in a few specialized areas.

MONGOLIA

56. In its response, Mongolia emphasizes the importance of the United Nations activities aimed at promoting the training of qualified personnel in developing countries and applauds the role of the United Nations to have Member States exchange their respective experience. The shortage of financial resources and a relatively weak technical basis for training are reasons for the urgency of the need for qualified national personnel, negatively affected by the continuing...
outflow of qualified personnel to developed western countries. The shortage of national personnel limits the process and prospects of social and economic development, aggravated by the continuing high level of illiteracy. Mongolia refers to its report, which describes the establishment of a national system for training personnel in the country as reflected in the report of the Secretary-General (see A/40/549/Add.1), and draws attention to the fact that the problem of illiteracy was already completely solved in the 1950s.

57. Mongolia is of the opinion that the principles for educating and training personnel of developing countries could include the following:

(a) Education must be public and free of charge;

(b) General education is an important part of training;

(c) A general plan and its implementation serve a unified national education policy and are important for social and economic development;

(d) Outside assistance must not infringe the sovereign right of a country to choose freely the pattern of its development;

(e) Questions of education must be resolved in relation to the requirements and goals of development and the human resources requirements;

(f) The goal of development must be to improve the well-being of the entire population on the basis of full participation and a just distribution of benefits;

(g) A unified personnel training system should be created with close links between schools, higher and secondary educational institutions and vocational training;

(h) All sectors of the population, including women and minorities, should participate;

(i) Education of children and young people must create a spirit of peace and friendship among peoples and intolerance regarding colonialism, apartheid and racism;

(j) National and international measures must be taken to halt the outflow of qualified personnel from developing countries to developed countries;

(k) The experience in other countries enhancing the role of the United Nations in this field should be analysed and disseminated;

(l) Scientific research work should be linked with training.

58. Mongolia is ready to co-operate closely with the United Nations to ensure the further implementation of the resolutions on the role of qualified personnel in the social and economic development of developing countries.
NETHERLANDS

59. In its response, the Netherlands submitted the following publications:

(a) Radio Netherlands Training Centre - for Radio, Television and the Press;
(b) IULA - Training for Local Government;
(c) The Netherlands Fellowship Programme;
(d) Basic Data on International Courses Offered in the Netherlands 1986/87;
(e) Prospectus, Institute of Social Studies;
(f) Institute for Housing Studies, BIE.

The information contained in these publications is summarized below.

60. The Radio Netherlands Training Centre in Hilversum (RNTC) renders assistance to media-organizations in developing countries to use radio, television and the press for information and education. Since 1969 people from over 80 countries have been trained in practical workshop courses with up to 12 participants each. Annually some 50 producer-directors, writers, presenters and journalists are trained. More specialized courses such as dramatization for information or the handling of news have been added. Courses on technical matters such as electronics, maintenance and repair or on design of equipment are not available.

61. Courses are also held in selected places in Africa and Latin America funded by the Ministry for Development Co-operation. General courses for programme-makers in radio or television with at least two years experience are held once a year for a period of 17 weeks, starting in mid-January. Thematic courses are held for a period of 14 weeks, starting in mid-September. Courses in developing countries are of variable duration, some cover a large area over a number of years.

62. The International Union of Local Authorities (IULA) offered an eight-week programme of comparative study on training for local government in March/May 1986, designed for senior officials concerned with local government training policies. Methods of training were observed in the Federal Republic of Germany, the Netherlands, and Sweden.

63. The fellowship programme in the Netherlands consists of: (a) a list of a wide range of courses for which a certain number of fellowships are available, (b) a list of international courses for which fellowships may be made available, and (c) possibilities for tailor-made training programmes. The fellowship programme is open to nationals of developing countries who have been professionally employed for some time in their own or another developing country. These "mid-career" courses are not granted for initial education, research or for obtaining a degree. Established terms and conditions for the programme are to be applied.

/...
64. International courses offered in the Netherlands are part of the so-called international education provided since the 1950s for about 1,800 yearly participants mainly from developing countries. They provide supplementary training mainly at the post-graduate level aimed at transmitting knowledge and experience for promoting the self-sufficiency of developing countries. The courses are given in English, French or Spanish, are of short duration, and are meant for persons having completed their studies and gained practical experience. The courses programmed for the academic year 1986/87 are listed in detail.

65. The Institute of Social Studies in The Hague was established in 1952 by the University of the Netherlands as a post-graduate institute. It aims to contribute to national and international efforts to understand and solve problems related to the development process. Over 3,900 persons from 115 countries participate in the Institute's programmes. The degree programmes for the academic year 1986/87 consist of agricultural and rural development, economic policy and planning, labour and development, politics and development strategies, public policy and administration, regional development and planning, and women and development. Non-degree teaching is available for communication policy and planning; development law and social justice; development planning techniques; international relations and development; international law and organizations for development; rural policy and project planning; and population and development.

66. For 25 years the Institute for Housing Studies (formerly Bouwcentrum International Education - BIE), an independent foundation in Rotterdam, has offered training and research programmes in housing, planning and building, focusing on low-income housing in developing countries. Twice a year a five-month diploma course in housing, planning and building is held in Rotterdam for professionals from developing countries. Training and research projects are established jointly with local institutions in developing countries; at present projects are operating in Colombia, Sri Lanka, Thailand and the United Republic of Tanzania. Research and consulting services are also conducted. The Institute does not award scholarships for tuition fees, living expenses or travel costs, for which provision may be made by bilateral or multilateral agencies.

67. In its response, Oman emphasizes the increase in quantity and quality of education to meet the challenges of development.

68. Education in Oman includes elementary, preparatory, secondary (with science and art options), technical (with industry, agriculture and commerce options), teacher training, handicapped training, university (with faculties in medicine, engineering, agriculture, science, education and Islamic sciences), and adult education. Education abroad is provided for graduate and post-graduate studies at universities.

69. The overall number of students attending general education in 1986 was 221,694, an increase of 104 per cent over 1981. University students amounted to 2,681 in 1986, an increase of 186 per cent over 1981.
70. A number of centres for the eradication of illiteracy and for adult education have been established. Since 1974 some 77 persons have taken part in 36 training courses in Arab countries on various aspects of the illiteracy and adult education, while 172 have taken part in courses and workshops on this subject in Oman.

71. Agricultural, industrial and domestic sciences are included in the curricula for elementary and preparatory school levels to further the awareness of students in these fields.

72. Technical schools are composed of commercial schools (two schools with a joint capacity of 456 students), industrial schools (one school with a capacity of 172 students) and agricultural schools (one school with a capacity of 180 students).

73. Teacher training has been developed gradually and is now provided at intermediate colleges in two-year courses subsequent to the completion of secondary education, as well as in training courses and educational workshops for updating the professional skills of participants. From 1973 to 1985, 574 teachers employed without professional training completed training courses during service. A total of 749 teachers graduated from teacher training institutes and 186 teachers graduated in the academic year 1985/86 from the newly established intermediate colleges. From 1977 to 1986, 286 trainees completed a course in school administration, 70 attended an educational management course and 21 completed the educational supervisor's course.

74. Vocational training has received priority since the 1970s, and the Education and Vocational Training Council, established in 1977, co-ordinates the objectives of education policy and vocational training, determines the country's requirements, establishes programmes and submits them to the Development Council. The Directorate-General for Vocational Training in the Ministry of Social Affairs and Labour supervises the vocational training centres and institutes and determines measures to develop the required human resources. While in the past vocational training was provided only at the industrial school of the Petroleum Development Oman Ltd., nine modern equipped training institutes were established by 1984, and in 1985 they were upgraded to the secondary school level. These institutes are located in different regions of Oman.

75. In three-year courses the following technical areas of specialization are offered: surveying; construction, including inspection, supervision and technical drawing; automobiles, including vehicle electrics, tractors, agricultural machinery, diesel and petrol mechanics; mechanics, including fixtures, machines, welding, forging and plumbing; and electrics and electronics, including radio, television, refrigeration and air-conditioning, electrical installations, maintenance and high voltage electrics. Areas of commercial specializations offered are: general administration, banks, insurance, business administration, clerical work, typing and accounting. Admission is granted to Omani nationals after completing preparatory education and are between the ages of 15 and 20, after receiving approval from the head of the institution and after passing a personal interview. Students receive a monthly allowance, a free meal daily, transport to and from the institute, local accommodation, teaching materials and working clothes, as well as medical services.
76. Special advanced courses are organized for graduates of vocational training institutes to increase their technical and professional capabilities. The number of students rose from 182 in 1976 to 2,631 in 1986, and the number of graduates increased from 10 in 1976 to 333 in 1985.

77. Evening courses on commercial and technical subjects are held for either long-term training (90 hours in three months) or short and intensive training (63 hours) upon request from certain government bodies. Attendance at these courses rose from 257 in 1976 to 1,831 in 1984. In addition, specialized courses are given in response to requests from governmental and non-governmental bodies in Oman.

78. Employees of enterprises and businesses in Oman receive training as apprentices during a period of two months followed by two weeks at an institute. Other vocational training facilities include the Institute of Public Administration, the training centres of various ministries and the training centres operated by enterprises. Private enterprises receive financial assistance to cover the costs of training.

79. The Oman Industrial Technical College had students enrolled in construction engineering, mechanical and vehicle engineering, electrical and electronic engineering, laboratory technology and commercial studies. The number of students rose from 74 in 1984 to 213 in 1985.

80. Foreign experts are sought when local resources are not available. Technical assistance programmes exist with the Federal Republic of Germany and the United Kingdom. Heads of sections in the vocational training institutes include personnel from Egypt, India and the Sudan.

81. The Institute of Health Sciences under the Ministry of Health provides training for nurses, assistant nurses, laboratory technicians and health assistants. New courses for x-ray technicians and for natural medicine have been added recently.

UKRAINIAN SOVET SOCIALIST REPUBLIC

82. In its reply, the Ukrainian Soviet Socialist Republic refers to its former comments as reflected in the report of the Secretary-General on the subject (see A/40/549/Add.1), stating that the systems for the training of qualified personnel in the Ukraine are part of a unified State system of continuous education on the basis of a constitutional right to non-discriminational education. Attendance is free of charge at all teaching institutions, and a major portion of students receive grants. After compulsory secondary education no restrictions are imposed on the continuation of education.

83. At present 1,220 secondary professional-technical schools provide training for 700,000 qualified workers and junior technical personnel. During the period 1981-1985, some 2 million qualified workers received training, thereby making 80 per cent of all recruits to production collectives graduates from the professional-technical schools. The system operates on the basis of teaching
combined with productive work. General education is combined with technical training mostly devoted to production training provided in teaching workshops and in the enterprises, while practical production experience is acquired in the enterprises' production line. Priority at present is given to training for automated production processes, computerization and micro-processing techniques, robots and flexible technologies. Beginning with the 1985/86 academic year, a new course on information and computer technology was being introduced. During the period 1986-1990 more than 15,000 specialists will be trained in automated production processes.

84. The relationship between schools and enterprises is defined by law: the enterprises plan and build schools, supply material and equipment and plan the admission of students. The enterprises provide experienced older personnel to work with the students. Graduates are directed to the relevant enterprises of the ministries and departments in which training is carried out. Students and staff of schools receive travel passes from the enterprises for health centres, guest houses, holiday centres and the like.

85. The Academy of Science co-operates closely with the professional-technical schools and disseminates scientific knowledge. Plans are drawn up in the current reform of general and technical education for the expansion of teaching-production combines and places for students in enterprises and production workshops.

86. The training of leaders of production units and managers of the system is provided by the specialized secondary education, which has to satisfy the requirements of the socialist society. Training is carried out in 731 specialized institutions, including courses offered during the day (692), evening (28), and through correspondence (11). During the period 1981-1985 almost 1.2 million were trained in these institutions, where recently courses on information and computer technology were introduced.

87. Higher education is provided in 146 universities and institutes and 24 subsidiary branches. During the period 1981-1985 about 750,000 graduated from these institutions, including 472,00 production workers who completed part-time courses. In 1985, of every 10,000 inhabitants, 522 were graduates, an almost twofold increase over the 1970 ratio. A constant effort is made to ensure optimum correlation between the requirement for specialists and the number of graduates. Recruitment has thus been increased in 53 undersubscribed subjects and has been reduced in 84 oversubscribed subjects. During the period 1981-1985, training was introduced in 11 new subjects, such as powder metallurgy, spray coating, construction of power stations, electronic medical equipment, agrochemistry and soil science.

88. Collaboration between education, science, industrial and agricultural enterprises and organizations is a means for integration. Work is done in combines (35 in higher education and 560 in enterprises) in which 15 branch and 17 research laboratories operate. Training of graduates in subsidiary branches of core departments set up in enterprises is introduced to adapt to the conditions of production work. At present more than 150 branches operate in this way.
89. The Ukrainian SSR makes a significant contribution to the training of specialists from foreign countries. At present there are more than 26,000 foreign nationals studying in the Republic's institutions, including 17,000 from Asia, Africa and Latin America. Foreign students enjoy the same rights as Soviet citizens with regard to the training.

UNION OF SOVIET SOCIALIST REPUBLICS

90. The training of national personnel for the developing countries is one of the important areas of the Soviet State's foreign policy activity; it is an effective means of strengthening the State sector and socialist forms of management in those countries. It is organized on the basis of intergovernmental agreements and has been going on since the mid-1950s. During that period, more than 2 million specialists and skilled workers from developing countries were trained with the help of the USSR.

91. Modalities for training such personnel include: (a) assistance in the construction of higher and secondary specialized educational establishments and vocational and technical training centres, (b) on-site training of local personnel with the help of Soviet experts during the construction and operation of units, and (c) training of foreign citizens in the USSR.

92. Under the first modality, more than 339 educational centres, vocational and technical colleges and facilities for permanent courses were built and equipped in 26 developing countries. These trained nearly 600,000 skilled workers for such branches of the economy as the ferrous and non-ferrous metals, light and food industries, electric power, agriculture and many other sectors. The largest number of educational centres was established in Algeria, Angola, Cuba, Egypt, the Islamic Republic of Iran, Iraq, Mongolia and Viet Nam.

93. For the training of national engineering and technical personnel, 49 institutes and technical schools were built in 17 countries. They include mining and metallurgy institutes, petroleum, gas and chemistry institutes and light industry institutes and polytechnics. Nearly 142,000 foreign citizens received training in them in more than 50 specialized subjects.

94. The second method used was to train the staff of large-scale economic and technical assistance projects in countries like Bangladesh, India and Mongolia. In all, nearly 1 million people were given the opportunity to acquire and upgrade skills.

95. The training of foreign nationals in the USSR occupies a special place in the system of training of personnel for developing countries. More than 93,900 specialists and workers from developing countries have received educational, industrial and technical training and tutoring in 270 specialized subjects in over 300 institutions.
96. Half of the specialists from developing countries trained in the USSR are future engineers, 20 per cent are educators and medical students, and the remainder are agronomists and technicians.

97. The Soviet Union is also increasing its help in the training of national personnel through multilateral channels. Examples include United Nations-sponsored permanent seminars on metallurgy, electric welding, and storage and processing of grain products. Many specialists are obtaining more advanced qualifications in the Moscow courses on metal processing, mineral fertilizer production and the training of information experts. The United Nations courses on demography have been operating for many years at the Moscow State University. New types of training and ways of upgrading the qualifications of national personnel are being developed to supplement previous methods, such as UNCTAD seminars on the development of trade between the developing countries and the socialist countries of eastern Europe. In all, more than 13,000 specialists from 119 countries of Asia, Africa and Latin America have received training in the USSR under United Nations technical assistance programmes.

UNITED ARAB EMIRATES

98. In its response, the United Arab Emirates refers to the United Arab Emirates Institute for Training in Banking, which contributes together with other institutions, such as the Management Development Institute and the National Computer Centre, to the training in and for banking and finance. In 1984, 353 nationals participated in the 30 courses organized by the Institute in preparatory programming, financial analysis and credit, external banking operations, management development, marketing and banking control. In 1985, 50 courses were offered, including computer, Islamic banks, English language and banking seminars. In 1986, 33 courses and one seminar on the role of banks in investment took place with 213 participants. Some courses were held in English, others in Arabic. Participants included employees of the central bank.

99. The training section of the central bank provides training in banking and management for its own employees. In 1985, the bank arranged 74 internal and external courses and seminars attended by 154 employees at various levels. Beginner courses for graduates are from two to three months in duration. Theoretical and practical training is provided in various sections of the bank. Aside from the courses at the Institute for Training in Banking, the bank sends its employees to courses held at the Management Development Institute and to language classes. The bank also sends employees abroad. In 1985, 28 employees attended courses and seminars at foreign institutions, such as the International Monetary Fund, the Jordanian Management Institute, the Bank of England, Citibank, Lloyds Bank, the Midland Bank, the Irish Management Institute, the Bahrain Training Centre, the Arab Planning Centre in Kuwait and the Gulf International Bank. The bank also grants fellowships to employees for study at the University of the United Arab Emirates or abroad and provides training for students, as well as lectures and seminars.
100. In the computer field training is provided both within the United Arab Emirates and abroad. A training centre is attached to the national computer centre, offering introductory lectures in languages, such as BASIC and COBOL. In addition, the company supplying the computer provides a training scheme for nationals of the United Arab Emirates in programming, system analysis, computer operation and computer management, as well as on any new equipment. Various computer companies organized conferences, seminars and workshops, which are attended by technicians working at the national computer centre. Other computer centres in the United Arab Emirates have their own highly qualified training facilities to which nationals are assigned for training.

101. Training abroad is foreseen for areas of specialization, such as data bases, data banks and computer management. Theoretical courses are held at the producer companies' training centres. Nationals are sent to study at other national computer centres and to attend conferences, seminars and training workshops. A number of nationals are also sent to specialized software centres. Priority is given to training in countries of the region if the instructional materials are the same as those used abroad.

102. With the assistance of an international organization, the United Arab Emirates is establishing an international centre for the training of nationals of the United Arab Emirates and nationals from other member countries of the Gulf Co-operation Council.

ZIMBABWE

103. Zimbabwe refers to its experience in establishing and developing systems of training qualified personnel in the public service and submitted a publication entitled "Training policy for the public service".

104. At the country's independence in 1980 only the public service training centre performed in-service training of civil servants. Adjustment was necessary, among other things, to expand training, introduce senior management training, promote training of front-line development workers for rural development and organize management training for professional and technical personnel.

105. Senior management training was necessitated as a priority by the exodus of white civil servants and the expansion of the public service. By the end of 1982, short training programmes had been conducted at the training management bureau for most assistant secretaries, under secretaries, deputy secretaries and permanent secretaries.

106. In 1985 the Zimbabwe Institute for Development and Management was established. It is responsible for the training of middle- and top-level management, while other training is carried out by the training management bureau. Training centres exist for administrative, clerical and executive training (one), for rural development workers at lower levels (one), for rural development oriented training for field staff (four), and for training in technical areas for ministries...
(three). Provincial training centres in each of the eight provinces are being planned.

107. Difficulties exist in attracting and retaining teaching staff and in obtaining funds for institution-building.

108. About 2,000 participants are trained monthly in the network of training centres. The positive and enthusiastic attitude of the participants towards training is emphasized in the country's report.

109. The objectives of training for the public service are to equip the public servant to perform the complex tasks of development, to support the development plan and to promote its implementation, as well as to respond to the needs of the people.

110. Training at all levels in the professional, technical and administrative managerial field will mainly be performed at facilities in Zimbabwe, but will also be undertaken elsewhere. The training may be sponsored officially or at the initiative of the public servant, which is encouraged and supported.

111. The responsibility for the co-ordination of training of civil servants at all levels lies with the Public Service Commission.

III. REPLIES RECEIVED FROM UNITED NATIONS ORGANIZATIONS AND SPECIALIZED AGENCIES

112. Replies were received from four organizations of the United Nations system, namely, the United Nations Conference on Trade and Development (UNCTAD), the International Labour Organisation (ILO), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the United Nations Industrial Development Organization (UNIDO).

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

113. The United Nations Conference on Trade and Development has taken initiatives in the training and utilization of skilled personnel and in technical co-operation activities in order to ameliorate the development process.

114. It concentrated its efforts on the outflows of skilled manpower from developing to developed countries. Following several meetings of governmental experts, the General Assembly, in its resolution 40/191, requested the Secretary-General of UNCTAD to convene a meeting of governmental experts to review the current situation with respect to all aspects of the international migration of skilled personnel from developing countries.

115. Another area of initiative is the co-operative exchange of skills for promoting economic co-operation among developing countries and their general
development. A governmental expert group recommended concrete measures to be adopted in that area. The Secretary-General of UNCTAD will undertake, in co-operation with other organizations of the United Nations system, a study on the role of technical co-operation among developing countries and, in particular, the exchange of skills among them in the transfer of technology.

116. In its own technical co-operation activities, UNCTAD, through the Advisory Service on Transfer of Technology (ASTT), has initiated, contributed to, organized and participated in a large number of seminars, workshops, courses, in-house and on-the-job training programmes for personnel from developing countries.

117. Relevant documents with regard to UNCTAD activities are: "Review of possible policy approaches and measures concerning the reverse transfer of technology" (TD/B/AC.35/11); "Preliminary outline of a set of guidelines on the reverse transfer of technology" (TD/B/AC.35/12 and Corr.1); "Possible elements for a questionnaire on quantitative and qualitative information on the reverse transfer of technology" (TD/B/AC.35/13); "Co-operative exchange of skills: institutional and policy issues" (TD/B/943 and Corr.1 and Add.1); "Report of the Meeting of Governmental Experts on Co-operative Exchange of Skills among Developing Countries" (TD/B/1043); "Technological co-operation among developing countries" (TD/B/C.6/118); "Technical and operational assistance provided by the Advisory Service on Transfer of Technology" (TD/B/C.6/113 and TD/B/C.6/137/Add.1).

INTERNATIONAL LABOUR ORGANISATION

118. The interest and experience of the International Labour Organisation in developing qualified national personnel is partly reflected in two documents:

(a) "Human resources development - some operational issues" written by S. K. Jain, ILO, Geneva, 1986, for the UNDP-sponsored International Workshop on Human Resources Development in Tokyo, April 1986;

(b) "Industrial training", UNDP/ILO evaluation study No. 11, published by UNDP in June 1984.

The contents of these documents are summarized below.

119. On the basis of conceptional issues, in particular the working concept in the context of social policies and the labour market, the operational approach should concentrate on the existing skill supply system, mainly by improving cost-effectiveness of training and by reaching out to the informal sector and rural areas. In defining aid policies, donors and organizations might use their acquired experience, create "centres of excellence", pursue policies on the basis of agreed norms and standards, and concentrate in areas where concerted national and international action can be expected to achieve results in a reasonable time span.

120. The evaluation study on industrial training examines the past, present and future in seven countries representatively selected to check on industrial training institutions, which in the past 30 years have been set up practically in all...
developing countries. Though most of the programmes undertaken jointly by UNDP and ILO have been successful in establishing viable institutions and have trained some hundreds of thousands of people at various levels, differences in effectiveness exist. Many institutions lack planning mechanisms, resulting in the existence of sectors not catered for, such as small-scale and artisan industries, women and young people. Problems exist in providing national facilities and in continuity of training following the termination of international projects. Projects themselves show problems resulting from policy issues and operating issues, which are enumerated in detail in the document.

UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION

121. The response from the United Nations Educational, Scientific and Cultural Organization refers to its co-operation in promoting training in educational planning, administration and management, decreasing the number of foreign experts and raising the number of specialists in science and technology and improving the effects of education.

122. The following forms of co-operation in educational planning, administration and management are listed:

(a) The International Institute of Education Planning (IIEP) in Paris undertakes training in methodologies and techniques of educational planning and management in annual courses of nine months duration for participants from all regions;

(b) Regional training courses for the middle-level educational personnel of ministries of education, planning units, etc.;

(c) International training seminars in Paris or in regional offices for high-level officials in charge of the development of education in their respective countries;

(d) Promotion of national courses, seminars and workshops for the training of educational personnel at the district or local level through financial and/or technical assistance;

(e) Preparation of training materials and their distribution to field experts, their counterparts, national training institutions, educational planning units, trainers, researchers and students.

123. Particular attention is given to higher efficiency, priority of training of in-service personnel, participatory planning and administration at the district, local and institutional levels, as well as horizontal training/research networks and regional data banks.

124. The increasing importance of the use of national personnel is reflected in the decrease of resident experts and the increase of national consultants and experts...
in UNESCO projects and the use of 33 per cent of the total annual budget for fellowship training.

125. Particular attention is given to the increase in the number and quality of national specialists teaching in the field of science and technology, as well as in technical and vocational education. Policies and methods for the training of educational personnel, improvement of higher education and better integration of training and research also receive special attention.

126. The gap between available resources for education and the aspiration of the young widens. In this context the acquisition of basic skills necessary for continuous education is the first prerequisite. The fostering of a national community of workers and international co-operation are required. UNESCO programmes for the study of the environment and natural resources bring together scientists from different countries. Similar programmes exist in other fields of science and engineering.

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

127. The United Nations Industrial Development Organization has an action programme for training national personnel in the social and economic development of their countries.

128. Illustrative projects undertaken by UNIDO in this context are:

(a) Industrial Training and Development Centre in Turkey - TUR/77/012;
(b) Industrial Management Development Services in Nigeria - NIR/75/012;
(c) Assistance to Small Industries Extension Training Institute in India to strengthen its capacity to offer training programmes for fellows from other developing countries - IND/84/002;
(d) Industrial Training Advisory Services in Egypt (Phase II) - EGY/81/011.